

I am concerned about the radiated interference potential of proposed BPL systems. Part 15 needs to be strengthened to protect licensed services from these new broadband noise sources.

Emissions testing should measure radiated levels in situ because BPL proposes to attach transmitters to uncontrolled wires that will work as antennas.

Radiated power levels must be very low because the chosen frequency of operation supports worldwide communication at low power levels. This characteristic is used by most of the services licensed to HF. If BPL raises the noise floor 30 dB, as some have suggested, the typical 100 watt transmitter used by fixed and mobile services around the world would need to be upgraded to 10,000 watts to maintain the current level of service. This is clearly impossible to implement. Pity the poor broadcaster who would have to upgrade from 10 kilowatts to 10 megawatts!

Any model used for a line impedance stabilization network should include nonlinear elements representing diodes in electronic power supplies. Testing must include searching for inter-modulation products with signals from all the other known power line communications systems as well as with signals that may be incidentally received by the power line.

The Access BPL proposes to increase coupling of HF across transformers. This may bring unexpectedly high levels of RF from mobile and broadcast transmitters into the home, setting off burglar and fire alarms.

More of the burden of cleaning up interference cases must be placed on the manufacturer. The operator, in this case the consumer, has no idea how to handle it. The costs must be born by the consumer at the point of purchase so they can make a wise choice between interfering and less interfering systems.

Broadband HF is an oxymoron. All of HF can only provide 30 MHz and has unique worldwide capability. SHF has 1000 times the bandwidth without the worldwide interference potential.